Report Date: 25 Mar 2014

Summary Report for Individual Task 551-88H-3508 Direct Cargo Operations (RO/RO) Status: Approved

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

DESTRUCTION NOTICE: None

**Condition:** Assigned as a Foreman aboard a Fast Sealift Ship/Large Medium Speed Roll-on/Roll-off (FSS/LMSR) vessel in an operational environment, during day or night, in normal weather conditions, given a completed risk assessment, safety briefing, an operation order/plan, traffic control plan, RO/RO flow plan, stowage plan, wheeled and tracked vehicles, lashing materials, and TC 4-13.17. This task should not be trained in MOPP 4.

Standard: Direct Cargo Operations (RO/RO) without injury to personnel or damage to equipment.

Special Condition: None

Safety Level: Low

MOPP: Never

#### **Task Statements**

Cue: You are assigned as a Foreman aboard a FSS/LMSR tasked with directing RO/RO Cargo Operations.

# **DANGER**

Adhere to all DANGER statements listed in the vehicles techincal operator's manual applicable to this procedure. Failure to comply may result in injury to personnel or damage to the equipment.

## **WARNING**

Adhere to all WARNING statements listed in the vehicles techincal operator's manual applicable to this procedure. Failure to comply may result in injury to personnel or damage to the equipment.

# **CAUTION**

Adhere to all CAUTION statements listed in the vehicles techincal operator's manual applicable to this procedure. Failure to comply may result in injury to personnel or damage to the equipment.

Remarks: None

Notes: None

#### **Performance Steps**

- 1. Execute the procedures to direct roll-on operations.
  - a. Direct the stowage of vehicles on the lower decks.
  - b. Direct the stowage of vehicles on the upper decks.
  - c. Direct the stowage of vehicles within fire lanes.
  - d. Ensure proper securing of wheeled vehicles.
  - e. Ensure proper securing of tracked vehicles.
- 2. Ensure the execution of the proper roll-on loading sequence in accordance with the RO/RO flow plan.
- 3. Ensure execution of coordinated traffic control plan with the following designated control points.
  - a. Call forward areas.
  - b. Bottom of portable vehicle ramp (PVR).
  - c. Top of PVR.
  - d. Exit point at each internal ramp.
- 4. Ensure the assignment of stowage area guides to guide vehicles into final position.

Note: Select experienced personnel to man traffic control points. These personnel must ensure the expeditious movement of vehicular traffic in the loading and off-loading process.

- Note 2: Tracked vehicles are typically classified as high density loads. Therefore, they are usually stowed below the weather deck to help optimize the ship's trim and stability by keeping the ship's overall center of gravity low.
- 5. Execute the procedures to direct tracked and wheeled vehicles to be secured using lashing/tie-downs.
  - a. Issue guidance directing the use of the correct type, strength, and number of lashings (see Figure 3-155).
- b. Issue guidance that the number of lashings for tracked vehicles will depend on the weight, and the number of lashings could range eight or more (see Figure 3-156).
- c. Issue guidance that the lashing requirements for wheeled vehicles are based on a universal four-lashing pattern (two fore and two aft) (see Figure 3-157).
  - d. Issue guidance to leave multi-fuel vehicles in neutral gear with the brakes engaged.
  - e. Issue guidance to leave gasoline-driven vehicles in gear with the brakes engaged.
  - f. Issue guidance to lock turrets on tanks and cabs on cranes, or lash them in position.

# **Fast Sealift Ships**

Vehicle Weight	Lashing Strength	Total Number of Lashings Required
Up to 8,930 lb	5,000 lb	4
Up to 17,860 lb	10,000 lb	4
Up to 25,180 lb	14,100 lb	4
Up to 30,360 lb	17,000 lb	4
Up to 62,510 lb	35,000 lb	4
Up to 125,020 lb	70,000 lb	4
Up to 250,040 lb	70,000 lb	8

# **Other Ships**

Vehicle Weight	Lashing Strength	Total Number of Lashings Required
Up to 5,260 lb	5,000 lb	4
Up to 10,530 lb	10,000 lb	4
Up to 14,850 lb	14,100 lb	4
Up to 17,900 lb	17,000 lb	4
Up to 36,860 lb	35,000 lb	4
Up to 73,720 lb	70,000 lb	4
Up to 147,450 lb	70,000 lb	8

Figure 3-155
Load Factor Lashing Requirements for FSS/LMSR Ships

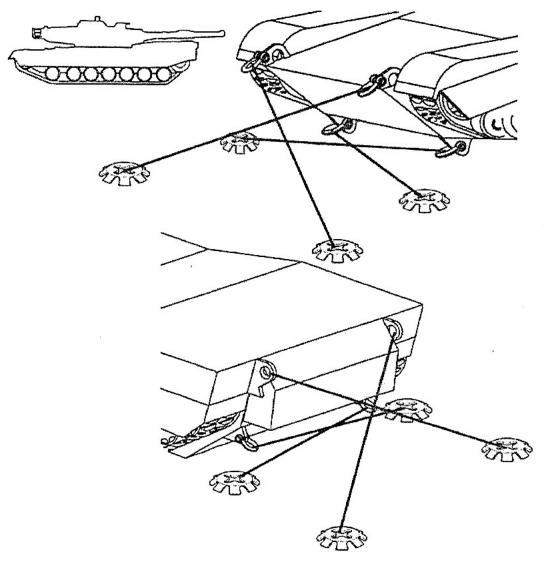


Figure 3-156
Required Lashing Points for an M1 Tank

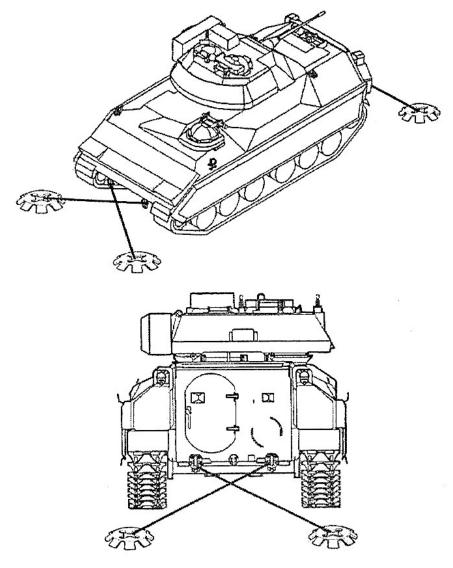


Figure 3-157
Front and Rear Points for Bradley Fighting Vehicle (BFV)

- 6. Execute the procedures to direct roll-off operations.
  - a. Ensure the execution of the proper roll-off loading sequence in accordance with the RO/RO flow plan.
  - b. Ensure traffic control points are designated and manned.

# **CAUTION**

Vehicle lashing assemblies (VLA) on the deck present a serious hazard for the equipment being loaded or unloaded and the work crew performing the operation.

c. Ensure that vehicle lashing assemblies (VLA) are placed on holding racks as soon as they are disconnected from vehicles to prevent vehicles from driving over VLA and damaging them.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** ore the Soldier GO if all performance steps are passed (P). Score the Soldier NO-GO if any performance step is failed (F). If the Soldier fails any step, show what was done wrong and how to do it correctly.

**Evaluation Preparation:** sure that all materials required to perform the task are available. Tell the Soldier that he/she will be evaluated on directing RO/RO cargo operations.

PERFORMANCE MEASURES	GO	NO-GO	N/A
Executed the procedures to direct roll-on operations.			
2. Ensured the execution of the proper roll-on loading sequence in accordance with the RO/RO flow plan.			
3. Ensured execution of coordinated traffic control plan with designated control points.			
4. Ensured the assignment of stowage area guides to guide vehicles into final position.			
5. Executed the procedures to direct tracked and wheeled vehicles to be secured using lashing/tie-downs.			
6. Executed the procedures to direct roll-off operations.			

#### Supporting Reference(s):

	Step Number	Reference ID	Reference Name	Required	Primary
Ī		TC 4-13.17	Cargo Specialist's Handbook	Yes	No

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

AR 200-1 delineates TRADOC responsibilities to integrate environmental requirements across DOTMLPF and ensures all training procedures, training manuals, and training doctrine includes sound environmental practices and considerations. The Army's environmental vision is to be a national leader in environmental and natural resource stewardship for present and future generations as an integral part of all Army missions. Environmental protection is never completed. Continuously be alert to ways to protect our environment and reduce waste. Leaders must ensure that their unit has an active and strong environmental program. They must understand the laws and know what actions to take.

Leaders bring focus, direction, and commitment to environmental protection. Commanding officers should ensure the following environmental programs are in place and are being maintained:

- -Hazardous materials program.
- -Hazardous waste program.
- -Hazardous communications program.
- -Pollution prevention and hazardous waste minimization recycling program.
- -Spill prevention and response plan program.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

All operations will be performed to protect and preserve Army personnel and property against accidental loss. Procedures will provide for public safety incidental to Army operations and activities and safe and healthful workplaces, procedures, and equipment. Observe all safety and/or environment precautions regarding electricity, cable, and lines. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required IAW AR 385-10, the Clean Air Act (CAA) and the CAA amendments, and the OSHA Hazard Communication standard.

Accidents are an unacceptable impediment to Army missions, readiness, morale, and resources. Decision makers at every level will employ risk management approaches to effectively preclude unacceptable risk to the safety of personnel and property affiliated with this task.

(a) Take personal responsibility.

- (b) Practice safe operations.(c) Recognize unsafe acts and conditions.(d) Take action to prevent accidents.(e) Report unsafe acts and conditions.(f) Work as a team.

## Prerequisite Individual Tasks: None

### **Supporting Individual Tasks:**

Task Number	Title	Proponent	Status
551-88H-2513	Direct Stowage of Wheeled and Tracked Vehicles on RO/RO Deck	551 - Transportation (Individual)	Approved
551-88H-1525	Stow Wheeled and Tracked Vehicles on RO/RO Deck	551 - Transportation (Individual)	Analysis Completed
551-88H-1417	Load Wheeled and Tracked Vehicles Aboard Cargo Vessel	551 - Transportation (Individual)	Analysis Completed
551-88H-1524	Perform Vehicle Guide Duties During RO/RO Operations	551 - Transportation (Individual)	Analysis Completed

### **Supported Individual Tasks:**

Task Number	Title	Proponent	Status
551-88H-3530	Interpret Data on Manifest	551 - Transportation (Individual)	Analysis
551-88H-4508	Monitor Marine Terminal Operations	551 - Transportation (Individual)	Analysis

### **Supported Collective Tasks:**

Task Number	Title	Proponent	Status
55-2-4809	Perform Sea Port of Embarkation Activities for Deployment	55 - Transportation (Collective)	Approved
55-2-4823	Perform Sea Port of Debarkation Activities for Redeployment	55 - Transportation (Collective)	Approved
55-2-1508	Conduct Vessel Operations	55 - Transportation (Collective)	Approved
55-2-4812	Perform Sea Port of Debarkation Activities for Deployment	55 - Transportation (Collective)	Approved
55-2-4819	Perform Sea Port of Embarkation Activities for Redeployment	55 - Transportation (Collective)	Approved